TO OUR SUBSCRIBERS.

In compliance with the wishes of very many of our Subscribers, we have had prepared a cover for binding the copies of THE BUILDER *for those who may be desirous of preserving them in uniform Volumes. These may be had on application at the office, at the price of Two Shillings; or our Publisher will undertake to have sets bound at a charge of Three Shillings per Volume.*

We also take this opportunity to inform our Subscribers that, with a view to the additional embellishment of the Volume just completed, we have had printed an ornamental Title-page, *which may be had gratis, on application at the Office.*

The Builder.

NO. LI.

SATURDAY, JANUARY 27, 1844.

WHILE stating to our readers that we have in hand many subjects for future appearance in our columns, few, we imagine, will think any thing more pertinent to the present juncture could be chosen (especially as we have promised it), than the consideration of

Westminster Bridge.

We shall first briefly discuss the taste of altering the external features of this public work, and then proceed to examine the scientific matters which have been broached upon the subject, the differing opinions relative to which have become matter of public notoriety.

Relative to the TASTE of making any apparent alteration in the external features of the bridge, we must declare ourselves not merely sceptical, not merely doubtful whether there be *good* taste in altering the outward dress of such a work, but we boldly go further, and, on the score of *taste*, openly declare all such alterations to be bad in principle, palpably *against* GOOD *taste*, and altogether condemnable.*

We have such a rooted dislike to the mutilation of original designs, that we can very rarely forgive the making any alteration from the intentions of him who generally must know most concerning the propriety of his own work. Much as we admire the talent shewn by the artist in his original designs, we like not the alterations which were made by Inigo Jones to old St. Paul's, how great soever may be our reverence for the grandeur and *gusto* of the portico itself, which he added to the ancient work of Pointed Architecture. We like not the deviations from Chambers's great design made for the buildings of Somerset Place, by forming King's College, in the eastern wing of that fine collection of edifices, in a style and of a form differing from the original conception, and against conformity with the buildings of the western wing, with which they should have corresponded.

We worship not the alterations made either within or without St. Margaret's Church, Westminster; so zealous and jealous are we on this subject, that we see with pain the fine transeptal doors of New St. Paul's clouted over lately with some mean plank-work; and would not have the authorities rest till that and every other inroad, however small, shall, as profanation, be eradicated from the sacred fabric—that this fine structure may remain in its integrity, *the gem of Protestant Churches,—an honour to the nation and its pure religion,—of all the cathedrals in the world by an especial divine favour permitted to be the only one, which, like the texture of Christ, was ever wrought in one texture throughout.*

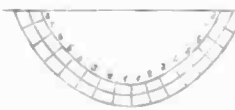
The alteration of an architectural work is indeed laying the destroying axe at its root: when a fabric is made parcel-wise of different tastes, men soon grow tired of it; and if not a very great work, it is then soon succeeded by a new erection all in one style. Francis Milizia, the Italian physician, author of the "Memorials of Ancient and Modern Architects," indeed wrote well when he declared "THESE PRETENDED CORRECTIONS ARE THE WORK OF A MADMAN. EDIFICES SHOULD BE LEFT AS ORIGINALLY BUILT, WHATEVER BE THEIR TASTE, OR THEIR WANT OF TASTE: THEY SERVE AS HISTORIES, AND ENABLE US TO COMPARE AND PUNISH MORE AND MORE THE TASTES OF SUCCEEDING TIMES."†

Making such declarations, it is scarcely necessary for us to add that so long as the present Westminster-bridge shall stand, we alike deprecate the masking of it either in the Norman style, or as though it were an edifice of Pointed Architecture. If its acclivities are to be reduced, if its burthens are to be eased, if its piers are to be lengthened, if its roadway is to be rendered more ample, we yet trust, that as far as architectural appearance is concerned, the whole will be done, preserving it as the design of Labelye,—its piers, cornices, balustrades, alcoves, pedestals, and other visible component parts, being restored exactly as when the work was first executed, except only in the alterations necessarily resulting from the required improvement of its traffic-way.

The architect whose work, under the plea of improvement, is mutilated by a successor, is always amply revenged by that successor's works being destroyed in a similar way; and often in his lifetime, like the man of sin, displaced from his office, he ceases to be overseer, *another takes his bishopric, and his children beg their bread.* Through following the mutilation-system, we have scarcely one tenth part so many architectural works approaching perfection as we otherwise should have. Half the *restorations* now being effected, at so much cost, to our churches and other ancient buildings, consist in the removal of the interpolations which have, in a wrongful spirit, been unfeelingly made to them.

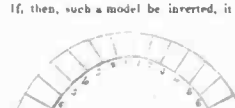
Before we go into an examination of the statements which have been put forth relative to the construction and proposed scientific improvements of Westminster-bridge, we shall enter a little into the *rationale* of bridge-arches, after which we shall proceed to examine the different proposals for altering the work.

Abstractly considered, the CATENARY, or natural curvature which a pendant chain assumes by its own weight, is the true form for an arch: in such an arch of suspension, it is evident that the various parts of the chain so act upon each other, that the quantum of gravity with which one part acts on the other parts, produces, when the whole chain has fallen to a state of rest, the *catenarian* or *chain* curve; and it should be equally evident that, were the catenary composed of several cords or strands in their curvature parallel to each other, the tension would be fair and just throughout;



and lines drawn in different places at right angles to the curve, would shew the joints of blocks, which, being hung upon a string, would exactly fit the curvature of the catenary.

If, then, such a model be inverted, it will



form a true catenarian masonry arch, wherein the just tension of the pendant catenarian arch is changed into compression, fairly and justly extended over the surface of every joint in the work, without any tendency to split the blocks by any partial or angular meeting of the surfaces of the voussoirs or blocks. But an arch so formed, though nearly such as often has been constructed, is very far from being thoroughly scientific, for it is by no means economical.

Nature, in forming pendant things, as icicles, the tails of animals, vegetable twigs, and other like matters, graduates them in dimension and strength; thus, in the tail of an animal, the second of the vertebræ has to sustain the first, the third has to sustain the second and first, and so on till the eighth has to carry all the others. If, however, Nature had made a tail equally thick all over, it is

* "It is to be deeply lamented, that from Blackfriars'-bridge having been constructed at a time when a flat roadway over a bridge was not deemed of advantage sufficient to lead to making the abutments much above a low shore, with the attendant expense and disadvantage of that, the unrivalled bridge seems doomed at no distant period to be either destroyed, or to be totally ruined in appearance. Within the London's short memory, the transcendantly elegant approaches of this bridge have been most wretchedly mutilated in order to lessen the acclivity, but this improvement is so striking and ideal, that besides the loss of beauty, it may be doubted whether any one has yet felt any relief in the transit of the bridge: a large mound of earth has been accumulated at each end of the bridge, in the once-beautiful squares, which have also from additions and staircases shared in the general wreck. In the manners of the author, Blackfriars'-bridge, with its approaches, and the fine streets leading to it, had no parallel in the world: this it does not appear will be long the case; *the desire to be doing* seems equally tormenting the destruction of Hyde's delightful grounds: first its balustrades are giving place under the plea of *parapet easiness*; next its columns will be removed in order to widen the roadway, in passing over which many thousand times the author never once saw obstructed; and in the end the city of London will have a costly but ugly production, which even its makers would be unable to recognise." "The citizens of London should be proud of every one of their fine public works, duly considering how scarce in architecture are both taste and structural excellence combined, and how few modern works, alleged to possess these properties, maintain their rank for even ten or twenty years. The citizens should remember, that they owe to their posterity unpolluted the architectural beauties which they have received from their fathers. The citizens know well what enormous sums they have in modern times spent, but how few pieces of architecture they have produced. This should lead them to value those works which they have inherited freely."—*Bartholomew's Essay on the Decline of Excellence in the Structure, &c., of Modern London Buildings.*

† Tomo I. p. 166. Questo preziose correzioni furono rubbate da debolissimi ingegni, gli edifizj come sono stati architettati da' loro Autori, di qualunque gusto siano, e di disgustosi servono di esempi, e di confronto, e per disgustare sempre più il gusto de' posteri.